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University of California
College of Agriculture
Agricultural Experiment Station
Berkeley, California

SEASONAL LABOR NEEDS FOR CALIFORNIA CROPS

SAN BENITO COUNTY

Progress Report No. 35

by

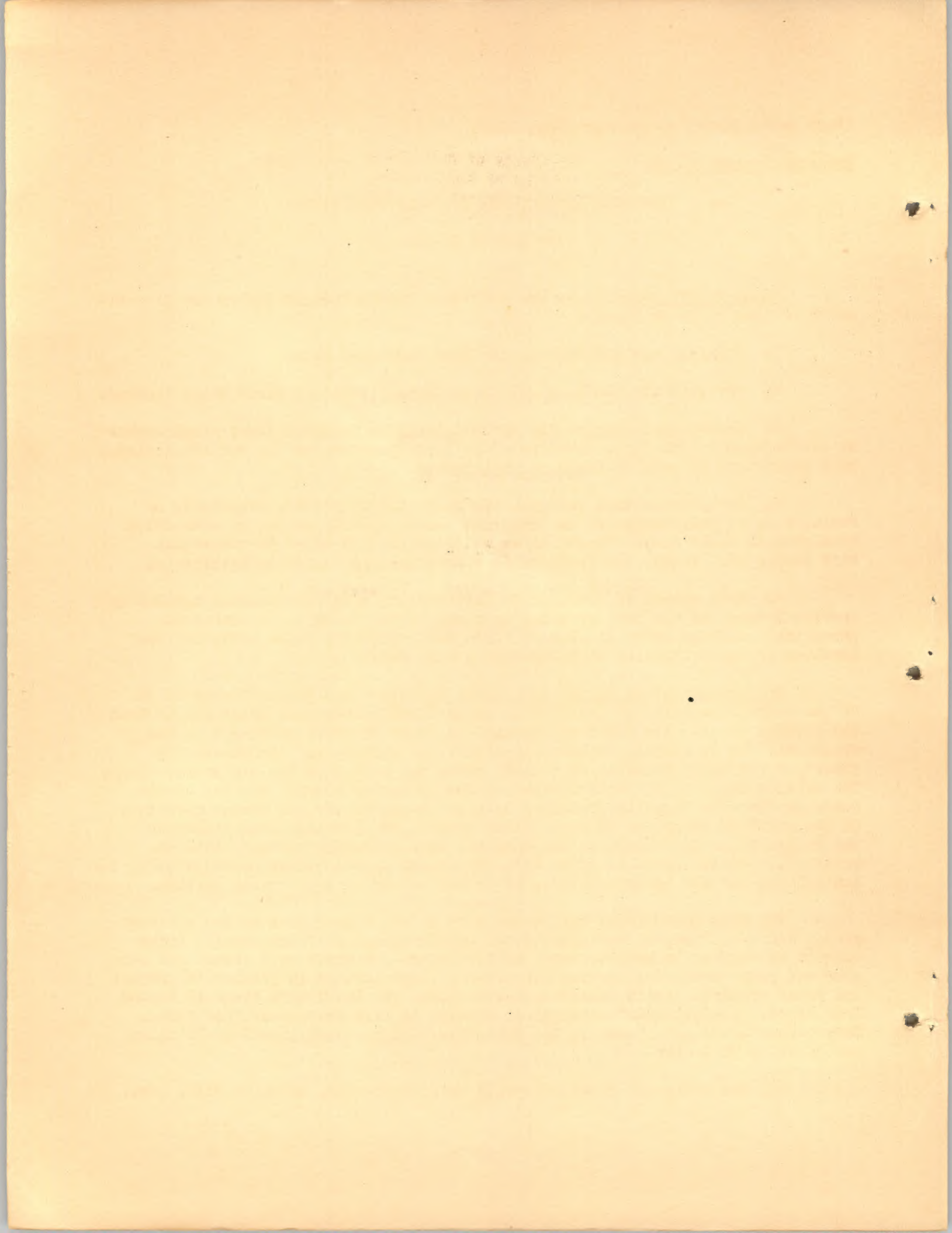
R. L. Adams

Preliminary -- Subject to Correction

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(Farm Labor Survey -- January-June, 1936)

Progress Report No. 35

Seasonal Labor Needs of California Crops

San Benito County

Scope of Presentation.-- The following considerations govern the presentation of this progress report:

1. The data are confined to the area indicated above.
2. The data are confined solely to crops, livestock needs being ignored.
3. The findings apply only to occasional or seasonal labor requirements as distinguished from labor contributed by farm operators and by workers employed on a year-round or regular basis of employment.
4. The presentation includes the so-called migratory, transient, or roving workers which comprise an important source of help needed in connection with certain tasks and at "peak" times which seasonally arise in connection with many field, truck, and fruit crops commercially produced in California.
5. This report is confined to California's need for seasonal agricultural workers because of the more pressing problems liable to arise in connection therewith. A later study is planned which will deal with other kinds of labor involved in the production of California's many crops.

Brief Description of the Area Under Review.-- San Benito County is one of the central counties of California, lying about twenty-five miles inland from the Pacific Ocean. Its northern boundary is about 75 miles southeast of San Francisco. It is roughly 25 miles in width, and extends in a southeasterly direction for about 65 miles in length, along the valley of the San Benito River. The Gabilan range on the west divides it from Monterey County, and the Diablo range on the east forms the boundary between it and Merced and Fresno counties. On the north it is joined by Santa Clara County, the boundary line following the Pajaro River for a part of the way, and then extending eastward into the mountains. On the south it joins Monterey County on the western portion along the Lewis Creek and San Lorenzo River; and Fresno County on the eastern portion.

The most intensively cultivated part of the county lies in the northern part, from Tres Pinos to the Santa Clara County line. Near San Juan, a large acreage is devoted to garlic, sugar beets, lettuce, various seed crops, and some pear and prune orchards. Around Hollister a large acreage is planted in apricot and prune orchards, which extend southward along the San Benito River to beyond Tres Pinos. A considerable acreage of walnuts is also grown near Tres Pinos. Many orchards are also found in the Santa Ana Valley, which lies 8 or 10 miles southeast of Hollister.

Hay and grain are grown generally over the county, often on hilly land.

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The most intensively cultivated part of the county lies in the northern part, from Tres Pinos to the Santa Clara County line. Near San Juan, a large acreage is devoted to alfalfa, sugar beets, lettuce, various seed crops, and some pear and prune orchards. Around Hollister a large acreage is planted in grapes and prune orchards, which extend southward along the San Benito River to beyond Tres Pinos. A considerable acreage of walnuts is also grown near Tres Pinos. Many orchards are also found in the Santa Ana Valley, which lies 8 or 10 miles southeast of Hollister.

Hay and grain are grown generally over the county, often on hilly lands.

The county contains a total of 890,880 acres, of which 125,898 acres are classed as crop land by the 1935 Census. This crop land is further classified as follows by the Census:

	<u>Acreage</u>
Crop land harvested in 1934	46,319
Crop failure*	17,746
Crop land idle or fallow	6,430
Plowable pasture	<u>55,403</u>
Total crop land	125,898

* The 1934 season was very dry, resulting in a much higher acreage of crop failure than normal.

Crop acreages in 1935 are estimated to have been as follows:*

	<u>Acreage</u>
Field crops	33,129
Vegetable crops	5,000
Orchard and vineyard	<u>16,553</u>
Total	54,682

* Data from Ward B. Saunders, Agricultural Commissioner, Hollister.

The orchard and truck farming area around Hollister and San Juan lies mostly between 150 feet and 350 feet in elevation. Farming for hay and grain is carried on at considerably higher elevations in various parts of the county, on rolling hills and smaller valleys. The Santa Ana Valley lies mostly between 600 and 750 feet above sea level.

A variety of soils is represented, the major part of the more intensively cultivated area in the San Benito Valley in the San Juan and Hollister districts being of the Yolo series, varying in texture from silt loam to silty clay loam, which are about equally represented. Smaller areas of fine sandy loam are found at various places near the river channel. These soils are quite uniform in texture to a depth of six feet or more. A short distance east of Hollister, there is a considerable acreage of Rincon loam, on which apricots have been planted quite extensively. This soil is underlaid at depths of from 1 to 3 feet by a compact subsoil. Various other soils occur, probably the most important of which are the loams, clay loams, and clay adobes of two or three different series, occupying much of the lower rolling land which is used for hay and grain in various parts of the county.

Crops, Acreage, and Production.-- The basis used in calculating occasional or seasonal need for labor in addition to that furnished by farm operators and regularly employed workers appears as table 1.

TABLE 1
Basis for Calculating Seasonal Labor Requirements -- San Benito County

Crop	Acreage	Production
Field crops:*		
Alfalfa	2,009	7,224 tons
Hay, other than alfalfa	6,650	10,000 tons
Barley	12,610	227,000 sacks
Wheat	7,917	95,000 sacks

Table continued on next page.

The county contains a total of 890,898 acres, of which 155,898 acres are classed as crop land by the 1935 Census. This crop land is further classified as follows by the Census:

155,898	Total crop land
55,405	Plowable pasture
6,430	Crop land idle or fallow
17,768	Crop failure*
46,315	Crop land harvested in 1934

* The 1934 season was very dry, resulting in a much higher acreage of crop failure than normal.

Crop averages in 1935 are estimated to have been as follows:

54,683	Total
36,853	Orchard and vineyard
8,000	Vegetable crops
33,129	Field crops

* Data from Ward B. Saunders, Agricultural Commissioner, Hollister.

The orchard and truck farming area around Hollister and San Juan lies mostly between 150 feet and 350 feet in elevation. Farming for hay and grain is carried on at considerably higher elevations in various parts of the county, on rolling hills and smaller valleys. The Santa Ana Valley lies mostly between 600 and 750 feet above sea level.

A variety of soils is represented, the major part of the more intensively cultivated area in the San Benito Valley in the San Juan and Hollister districts being of the Yolo series, varying in texture from silt loam to silty clay loam, which are about equally represented. Smaller areas of fine sandy loam are found at various places near the river channel. These soils are quite uniform in texture to a depth of six feet or more. A short distance east of Hollister, there is a considerable acreage of Rincon loam, on which apricots have been planted quite extensively. This soil is underlain at depths of from 1 to 5 feet by a compact subsoil. Various other soils occur, probably the most important of which are the loams, clay loams, and clay adobe of two or three different series, occupying much of the lower rolling land which is used for hay and grain in various parts of the county.

Crops, Averages, and Production. -- The basis used in calculating occasional or seasonal need for labor in addition to that furnished by farm operators and regularly employed workers appears as table 1.

TABLE 1
Basis for Calculating Seasonal Labor Requirements -- San Benito County

Crop	Averages	Production
Wheat	7,917	22,000 sacks
Barley	12,610	227,000 sacks
Hay, other than alfalfa	6,650	10,000 tons
Alfalfa	2,009	7,324 tons
Field crops*		

Table continued on next page.

Table 1 continued.

Crop	Acreage	Production
Field crops:(continued)		
Oats	875	17,500 sacks
Sugar beets	1,407	14,256 tons
Potatoes	200	20,000 sacks
Garlic	1,200	85,000 sacks
Vegetable crops:		
Lettuce	1,200	120,000 crates
Peas -- fall crop	500	25,000 hampers
Tomatoes	3,300	16,500 tons
Fruit crops:		
Apples	196	1,460 tons
Apricots	5,204	12,000 tons
Wine grapes	1,744	3,488 tons
Peaches	308	1,848 tons
Pears -- about 40 per cent Bartlett	1,278	2,420 tons
Prunes	7,030	13,500 tons
Walnuts	736	450 tons
Seed crops:		
Radish	150	
Onion bulbs	15	
Endive	25	
Broccoli	25	
Cauliflower	15	
Lettuce	300	
Sweet corn	25	
Squash	40	
Mustard	300	
Parsley	60	
Celery	60	
Asters	35	
Zinnias	15	
Snapdragons	15	
Petunias	15	
Verbena	6	
Coreopsis	2	
Marigold	15	
Salpiglossis	10	

* Data on field crops from Ward B. Saunders, Agricultural Commissioner, San Benito County.

Operations Requiring Seasonal Labor and Time of Need.-- Farm operations requiring the use of seasonal or occasional labor for the various crops raised in San Benito County are indicated in table 2. This tabulation does not include the employing of shed workers needed to wash, pack, and prepare various commodities for shipping and marketing.

Table 1 continued.

Crop	Average	Production
Field crops:(continued)		
Oats	875	17,500 sacks
Sugar beets	1,407	14,070 tons
Potatoes	200	20,000 sacks
Garlic	1,200	88,000 sacks
Vegetable crops:		
Lettuce	1,200	120,000 crates
Pears -- Fall crop	800	25,000 bushels
Tomatoes	2,300	16,500 tons
Fruit crops:		
Apples	198	1,480 tons
Apricots	2,204	12,000 tons
Wine grapes	1,744	3,488 tons
Peaches	308	1,848 tons
Pears -- about 40 per cent Bartlett	1,278	2,450 tons
Prunes	7,030	13,500 tons
Walnuts	738	450 tons
Seed crops:		
Radish	180	
Onion bulbs	12	
Endive	25	
Broccoli	25	
Cauliflower	12	
Lettuce	300	
Sweet corn	25	
Squash	40	
Mustard	300	
Parsley	80	
Celery	60	
Asters	35	
Flowers	15	
Shadblow	15	
Petunias	15	
Verbena	5	
Coreopsis	2	
Marigold	15	
Salpiglossis	10	

* Date on field crops from Ward E. Saunders, Agricultural Commissioner, San Benito County.

Operations requiring seasonal labor and time of need. -- Farm operations requiring the use of seasonal or occasional labor for the various crops raised in San Benito County are indicated in table 2. This tabulation does not include the employing of shed workers needed to wash, pack, and prepare various commodities for shipping and marketing.

TABLE 2

Operations Requiring Use of Seasonal Labor and Times of Needs by Crops
San Benito County

Crop	Operation	Time of need
Field crops: Garlic	Planting	December-January -- 50 per cent of acreage each month
	Hoeing -- first	February-March -- 50 per cent of acreage each month
	second	April -- total acreage
	Pulling and piling	July-August -- 50 per cent of acreage each month
	Topping and sacking	July-August -- 50 per cent of crop each month
Grain Barley Wheat Oats	Harvesting -- 60 per cent by seasonal workers	June 15-30 -- 10 per cent of acreage July 1-31 -- 40 per cent of acreage August 1-31 -- 40 per cent of acreage September 1-30 -- 10 per cent of acreage
Hay, other than alfalfa	Mowing	April 25-30 -- 10 per cent of acreage
	Raking	May 1-30 -- 90 per cent of acreage April 25-30 -- 10 per cent of acreage
	Shocking	May 1-30 -- 90 per cent of acreage
	Trimming shocks	May -- 100 per cent of acreage
	Baling	June -- 50 per cent of tonnage July -- 50 per cent of tonnage
Potatoes -- Use of seasonal labor inconsequential -- hence ignored.		
Seed crops: Radish	Thinning	January
	Hoeing	February
	Cutting and piling by hand	August
	Threshing	August
Onion bulbs	Knife weeding	February
	Hoeing	May and July -- whole acreage each month
	Pulling and piling by hand	September
	Topping	September

Table continued on next page.

TABLE 2
Operations Requiring Use of Seasonal Labor and Times of Needs by Crops
San Benito County

Crop	Operation	Time of Need
Field crops: Garlic	Planting Hoing -- first second Pulling and planting Topping and weeding	December-January -- 50 per cent of acreage each month February-March -- 50 per cent of acreage each month April -- total acreage July-August -- 50 per cent of acre- age each month July-August -- 50 per cent of crop each month June 15-30 -- 10 per cent of acre- age July 1-31 -- 40 per cent of acreage August 1-31 -- 40 per cent of acre- age September 1-30 -- 10 per cent of acreage
Grain Barley Wheat Oats	Harvesting -- 50 per cent by seasonal workers	September 1-30 -- 10 per cent of acreage August 1-31 -- 40 per cent of acre- age July 1-31 -- 40 per cent of acreage June 15-30 -- 10 per cent of acre- age
Hay, other than alfalfa	Mowing Raking Shocking Trimming shocks Baling	April 25-30 -- 10 per cent of acre- age May 1-30 -- 20 per cent of acreage April 25-30 -- 10 per cent of acre- age May 1-30 -- 20 per cent of acreage May -- 100 per cent of acreage May -- 100 per cent of acreage June -- 50 per cent of tonnage July -- 50 per cent of tonnage
Potatoes -- Use of seasonal labor inconsequential -- names ignored.		
Seed crops: Radish	Thinning Hoing Cutting and pulling by hand Thrashing	January February August August
Onion bulbs	Knife weeding Hoing Pulling and pulling by hand Topping	February May and July -- whole acreage each month September September

Table continued on next page.

Crop	Operation	Time of need
Seed crops: (continued)		
Endive	Thinning	January-February -- half acreage each month
Broccoli and cauliflower	Hoeing	March and May -- total acreage each month
	Thinning	December
	Hoeing	January, March and May -- total acreage each month
	Cutting and piling by hand	August
Lettuce	Threshing	September
	Thinning	January-February -- half acreage each month
	Hoeing Hand cutting	March-April -- total acreage each month
Sweet corn	Hoeing	May and July -- total acreage each month
	Shucking	October
Squash	Planting	April
	Hoeing	May and July -- total acreage each month
	Pulling	October
Mustard	Thinning	January
	Hoeing	February
	Cutting and piling by hand	July
	Threshing	July
Parsley and celery	Transplanting	November
	Hoeing	January, March and May -- total acreage each month
	Cutting and piling by hand	September
Asters	Thinning	January-February -- half acreage each month
	Hoeing	March, April and June -- total acreage each month
	Cutting and piling by hand	October
Zinnias	Thinning	January
	Hoeing	March, April and June -- total acreage each month
	Hand picking heads and piling	October

Table continued on next page.

Table 2 continued.

Crop	Operation	Time of need
Seed crops: (continued)		
Snapdragons	Knife weeding Thinning Hoeing Hand picking -- three pickings	December January March, May and June -- total acreage each month July-August -- half acreage each month
Petunias	Knife weeding Thinning Hoeing Cutting and piling by hand	December January March, May and June -- total acreage each month September
Verbena *	Thinning Hoeing Cutting and piling by hand	February March and May -- total acreage each month July
Marigolds	Thinning Hoeing Cutting and piling by hand	April May-June -- total acreage each month July 15-31
Salpiglossis	Thinning Hoeing Cutting and piling by hand	February April, May and June -- total acreage each month July 15-31
Sugar beets	Thinning Hoeing Irrigating -- 80 per cent by seasonal workers	February -- 15 per cent of acre- age March -- 35 per cent of acreage April -- 35 per cent of acreage May -- 15 per cent of acreage March -- 15 per cent of acreage April -- 35 per cent of acreage May -- 35 per cent of acreage June -- 15 per cent of acreage April, May and June -- two-thirds of acreage each month

Table continued on next page.

Table 2 continued.

7.

Crop	Operation	Time of need
Seed crops: (continued)		
Sugar beets (continued)	Topping and loading	<p>July -- 5 per cent of tonnage</p> <p>August -- 30 per cent of tonnage</p> <p>September -- 30 per cent of tonnage</p> <p>October -- 35 per cent of tonnage</p>
Vegetable crops:		
Lettuce	Thinning	<p>February -- 33 per cent of acreage</p> <p>March -- 5 per cent of acreage</p> <p>April -- 8 per cent of acreage</p> <p>May -- 5 per cent of acreage</p> <p>June -- 3 per cent of acreage</p> <p>July -- 5 per cent of acreage</p> <p>August -- 10 per cent of acreage</p> <p>September -- 31 per cent of acreage</p>
	Hoeing	<p>March -- 33 per cent of acreage</p> <p>April -- 5 per cent of acreage</p> <p>May -- 8 per cent of acreage</p> <p>June -- 5 per cent of acreage</p> <p>July -- 3 per cent of acreage</p> <p>August -- 5 per cent of acreage</p> <p>September -- 10 per cent of acreage</p> <p>October -- 31 per cent of acreage</p>
	Irrigating twice -- 66 per cent by seasonal workers	<p>April -- 13 per cent of acreage</p> <p>May -- 13 per cent of acreage</p> <p>June -- 8 per cent of acreage</p> <p>July -- 8 per cent of acreage</p> <p>August -- 15 per cent of acreage</p> <p>September -- 41 per cent of acreage</p> <p>October -- 31 per cent of acreage</p>

Table continued on next page.

<p>1. The first part of the report is a general statement of the work done during the year.</p>		<p>2. The second part of the report is a detailed account of the work done during the year.</p>
<p>3. The third part of the report is a summary of the work done during the year.</p>		<p>4. The fourth part of the report is a list of the names of the persons who have been employed during the year.</p>
<p>5. The fifth part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>6. The sixth part of the report is a list of the names of the persons who have been employed during the year.</p>
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<p>9. The ninth part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>10. The tenth part of the report is a list of the names of the persons who have been employed during the year.</p>
<p>11. The eleventh part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>12. The twelfth part of the report is a list of the names of the persons who have been employed during the year.</p>
<p>13. The thirteenth part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>14. The fourteenth part of the report is a list of the names of the persons who have been employed during the year.</p>
<p>15. The fifteenth part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>16. The sixteenth part of the report is a list of the names of the persons who have been employed during the year.</p>
<p>17. The seventeenth part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>18. The eighteenth part of the report is a list of the names of the persons who have been employed during the year.</p>
<p>19. The nineteenth part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>20. The twentieth part of the report is a list of the names of the persons who have been employed during the year.</p>
<p>21. The twenty-first part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>22. The twenty-second part of the report is a list of the names of the persons who have been employed during the year.</p>
<p>23. The twenty-third part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>24. The twenty-fourth part of the report is a list of the names of the persons who have been employed during the year.</p>
<p>25. The twenty-fifth part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>26. The twenty-sixth part of the report is a list of the names of the persons who have been employed during the year.</p>
<p>27. The twenty-seventh part of the report is a list of the names of the persons who have been employed during the year.</p>		<p>28. The twenty-eighth part of the report is a list of the names of the persons who have been employed during the year.</p>

Crop	Operation	Time of need
Vegetable crops: (continued)		
Lettuce (continued)	Cutting -- harvesting	April -- 1 per cent of crop May -- 40 per cent of crop June -- 1 per cent of crop July -- 1 per cent of crop August -- 2 per cent of crop September -- 4 per cent of crop October -- 20 per cent of crop November -- 30 per cent of crop December -- 1 per cent of crop
Peas	Hoeing	August -- 400 acres
	Picking	September -- 20-30, 25 per cent of acreage October -- 1-20, 75 per cent of acreage
Tomatoes	Transplanting in beds Setting plants in field	March April 15 to May 15 -- 50 per cent of acreage each month
	Replanting	May
	Hoeing	June
	Picking	September -- 33 per cent of crop October -- 67 per cent of crop
Fruit crops:		
Apples	Pruning	November, December, January and February -- 25 per cent of acreage each month
	Thinning	May
	Picking	September 15-30 -- 25 per cent of crop October 1-31 -- 75 per cent of crop
Apricots	Pruning	October -- 15 per cent of acre- age November -- 30 per cent of acreage December -- 30 per cent of acreage January -- 20 per cent of acre- age February -- 5 per cent of acreage

Table continued on next page.

Date	Description	Amount
1941 January	To balance forward	100.00
February	By cash	50.00
March	By cash	75.00
April	By cash	100.00
May	By cash	125.00
June	By cash	150.00
July	By cash	175.00
August	By cash	200.00
September	By cash	225.00

Crop	Operation	Time of need
Fruit crops: (continued)		
Apricots (continued)	Thinning Picking	April 10-30 -- total acreage July 5-31 -- 90 per cent of crop August 1-15 -- 10 per cent of crop
	Cutting for drying Other labor in dry yards	July 5-31 -- 72 per cent of crop August 1-15 -- 8 per cent of crop Same as cutting, and for 10 days later.
Grapes -- wine varieties	Pruning Hoeing and suckering -- 50 per cent by seasonal workers Picking -- 50 per cent by seasonal workers	December, January and February -- 33 1/3 per cent of acreage each month April-May -- 50 per cent of acreage each month October-November -- 50 per cent of crop each month
Peaches	Pruning Thinning Picking Sorting	November, December, and January -- 33 1/3 per cent of acreage each month May August August
Pears	Pruning Picking Cutting for drying Other labor in dry yards	November, December, January and February -- 25 per cent of acreage each month July 20-31 -- 10 per cent of crop August 1-31 -- 30 per cent of crop September 1-30 -- 30 per cent of crop October 1-31 -- 30 per cent of crop August-September -- half of tonnage dried each month August-September -- half of tonnage dried each month
Prunes	Pruning -- half acreage each year -- 75 per cent by seasonal workers	November, December, January and February -- 12 1/2 per cent of acreage each month

Table continued on next page.

Date	Description	Amount
	To Balance	100.00
1912	Jan 1	100.00
1913	Jan 1	100.00
1914	Jan 1	100.00
1915	Jan 1	100.00
1916	Jan 1	100.00
1917	Jan 1	100.00
1918	Jan 1	100.00
1919	Jan 1	100.00
1920	Jan 1	100.00
1921	Jan 1	100.00
1922	Jan 1	100.00
1923	Jan 1	100.00
1924	Jan 1	100.00
1925	Jan 1	100.00
1926	Jan 1	100.00
1927	Jan 1	100.00
1928	Jan 1	100.00
1929	Jan 1	100.00
1930	Jan 1	100.00
1931	Jan 1	100.00
1932	Jan 1	100.00
1933	Jan 1	100.00
1934	Jan 1	100.00
1935	Jan 1	100.00
1936	Jan 1	100.00
1937	Jan 1	100.00

Crop	Operation	Time of need
Fruit crops: (continued)		
Prunes (continued)	Picking up	August 20-31 -- 25 per cent of crop September 1-30 -- 75 per cent of crop
	Dipping and drying -- 75 per cent by seasonal workers	August 20-31 -- 25 per cent of crop September 1-30 -- 75 per cent of crop
Walnuts	Knocking and picking up	September -- 10 per cent of crop October -- 75 per cent of crop November -- 15 per cent of crop

* Figures are averages for two years (biennial crop)

Findings of Seasonal Labor Needs.-- Details and summaries of seasonal labor requirements of San Benito County agriculture are presented as table 3. The "size of job" are figures drawn from table 1 in terms of either acreage or output in tons, crates, boxes, or whatever unit is commonly used. The "output per man-day" is an average figure for the entire acreage or output figured in packed crates, hampers, or boxes (in case of fruits and vegetables). If the work is of a nature that requires a crew different members of which perform different tasks (such as cutting, trimming, loading, and hauling cauliflower; trimming and crating celery, etc.), then the average shown is per man based on the entire crew. Length of day is 9 hours, November to February; 10 hours, March to October, unless otherwise stated. Wide variations in output occur between farm and farm, field and field, and season and season, because of differences in soil types, climatic conditions, weeds, yields, and other factors influencing the amount of work that a laborer can perform in a given day. Moreover, the basis of output is a mature, experienced male worker, without reference to use of women, children, and more or less inexperienced help that is sometimes used in connection with certain of the tasks requiring use of seasonal workers. The column headed "available days" reflects (a) limitations set from the period within which the work must be performed because of the nature of the task, such as transplanting, thinning, weeding, and cutting, and (b) available days as determined by weather conditions, inclement weather reducing the number of days when a required task can be performed. The "required number of individuals" is given in terms of workers as noted above in connection with "output per man-day."

It is probable that the estimated number of workers required, as recorded in table 3, will often be too low, for the reason that "peaks" frequently occur, during which an unusually large proportion of the job is done in a very short period. This would naturally require a much greater number of workers than when the work is spread over a longer period, even though the total amount of labor (in man-days) remains the same.

TABLE 3

Seasonal Labor Needs -- San Benito County -- by Months and Tasks

Month	Crop and task	Size of task	Output per man-day	Required man-days	Available days	Required number of workers*
January	Radishes: Thinning	150 acres	1.5 acres	100	18	49
	Endive: Thinning	12 acres	1.25 acres	10		
	Broccoli and cauliflower: Hoeing	40 acres	1.75 acres	23		
	Lettuce: Thinning	150 acres	1.5 acres	100		
	Mustard: Thinning	300 acres	1.25 acres	240		
	Parsley and celery: Hoeing	120 acres	0.75 acre	160		
	Asters: Thinning	17 acres	0.5 acre	34		
	Zinnia: Thinning	15 acres	0.5 acre	30		
	Snapdragon: Thinning	15 acres	0.17 acre	90		
	Petunias: Thinning	15 acres	0.17 acre	90		
	Garlic: Planting	600 acres	0.17 acre	3,600	18	200
	Apples: Pruning	50 acres	0.2 acre	250	18	14
	Apricots: Pruning	1,040 acres	0.17 acre	6,240	18	347
	Grapes: Pruning	580 acres	1.5 acres	387	18	22
	Peaches: Pruning	103 acres	0.25 acre	412	18	24
	Pears: Pruning	320 acres	0.17 acre	1,920	18	107
	Prunes: Pruning	656 acres†	0.33 acre	1,970	18	110
	Totals			15,656	18	870 man-months
February	Radishes: Hoeing	150 acres	1.75 acres	86	21	23
	Onion bulbs: Knife weeding	15 acres	0.17 acre	90		
	Endive: Thinning	13 acres	1.25 acres	11		
	Lettuce: Thinning	150 acres	1.5 acres	100		
	Mustard: Hoeing	300 acres	2.5 acres	120		

Table continued on next page. 11.

General	Name of the Corporation	Capital Stock	Paid-up Capital	Surplus	Total Assets	Total Liabilities
Manufacturing	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
Manufacturing	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000
	The Albany Paper Mill	\$100,000	\$75,000	\$25,000	\$100,000	\$100,000

STATE OF NEW YORK
IN SENATE
January 10, 1901.

Table continued.

Month	Crop and task	Size of task	Output per man-day	Required man-days	Available days	Required number of workers*
February (cont.)	Asters: Thinning	18 acres	0.5 acre	36	21	29
	Verbena: Thinning	6 acres	0.5 acre	12		
	Salpiglossis: Thinning	10 acres	0.5 acre	20		
	Garlic: Hoeing (first time)	600 acres	1.0 acre	600		
	Sugar beets: Thinning	211 acres	0.4 acre	527		
	Lettuce: Thinning	400 acres	0.5 acre	800		
	Apples: Pruning	50 acres	0.2 acre	250		
	Apricots: Pruning	260 acres	0.17 acre	1,560		
	Grapes: Pruning	580 acres	1.5 acres	387		
	Pears: Pruning	320 acres	0.17 acre	1,920		
	Prunes: Pruning	656 acres*	0.33 acre	1,970		
	Totals			8,489		404 man-months
March	Endive: Hoeing	25 acres	1.25 acres	20	23	24
	Broccoli and cauliflower: Hoeing	40 acres	1.75 acres	23		
	Lettuce: Hoeing	300 acres	2.0 acres	150		
	Parsley and celery: Hoeing	120 acres	0.75 acre	160		
	Asters: Hoeing	35 acres	0.5 acre	70		
	Zinnias: Hoeing	15 acres	0.5 acre	30		
	Snapdragons: Hoeing	15 acres	0.5 acre	30		
	Petunias: Hoeing	15 acres	0.25 acre	60		
	Verbena: Hoeing	6 acres	0.5 acre	12		
	Garlic: Hoeing (first time)	600 acres	1.0 acre	600		
	Sugar beets: Thinning	492 acres	0.4 acre	1,230		
	Hoeing	211 acres	1.0 acre	211		
	Lettuce: Thinning	60 acres	0.5 acre	120		
	Hoeing	400 acres	1.0 acre	400		
	Tomatoes: Transplanting in beds	5,000,000 plants†	5,000 plants	1,000		
	Totals			4,116	23	179 man-months
April	Lettuce: Hoeing	300 acres	2.0 acres	150	54	
	Squash: Planting	40 acres	0.75 acre	54		

Table continued on next page.

Table continued.

Month	Crop and task	Size of task	Output per man-day	Required man-days	Available days	Required number of workers*
April (cont.)	Asters: Hoeing	35 acres	0.5 acre	70	23	16
	Zinnias: Hoeing	15 acres	0.5 acre	30		
	Marigolds: Thinning	15 acres	0.5 acre	30		
	Salpiglossis: Hoeing	10 acres	0.5 acre	20		
	Garlic: Hoeing (second time)	1,200 acres	1.5 acres	800	23	35
	Hay: Mowing	333 acres †	10.0 acres	34	5	7 (from 25th to 30th)
	Raking	333 acres †	20.0 acres	17	5	4 (from 25th to 30th)
	Sugar beets: Thinning	492 acres	0.4 acre	1,230	23	54
	Hoeing	492 acres	1.0 acre	492	23	22
	Irrigating	750 acres †	3.0 acres	250	23	11
	Lettuce: Thinning	96 acres	0.5 acre	192	23	9
	Hoeing	60 acres	1.0 acre	60	23	3
	Cutting	1,200 crates	30 packed crates	40	4	10 (for 4 days)
	Irrigating	104 acres †	3.0 acres	34	23	2
	Tomatoes: Setting plants in field	1,650 acres	1.0 acre	1,650	12	(from 15th to 30th)
	Apricots: Thinning	-- 6	--	--	18	6 (from 10th to 30th)
	Grapes: Hoeing and suckering	436 acres †	1.0 acre	436	23	19
	Totals			5,589	23	243 man-months
May	Onion bulbs: Hoeing	15 acres	0.5 acre	30	25	18
	Endive: Hoeing	25 acres	1.25 acres	20		
	Broccoli and cauliflower: Hoeing	40 acres	1.75 acres	23		
	Sweet corn: Hoeing	25 acres	1.00 acre	25		
	Squash: Hoeing	40 acres	2.00 acres	20		
	Parsley and celery: Hoeing	120 acres	0.75 acre	160		
	Snapdragons: Hoeing	15 acres	0.5 acre	30		
	Petunias: Hoeing	15 acres	0.25 acre	60		
	Verbena: Hoeing	6 acres	0.5 acre	12		
	Marigolds: Hoeing	15 acres	0.5 acre	30		

Table continued on next page.

Table continued.

Month	Crop and task	Size of task	Output per man-day	Required man-days	Available days	Required number of workers*
May (cont.)	Salpiglossis: Hoeing	10 acres	0.5 acre	20 [↑]		
	Hay: Mowing	2,993 acres †	10.0 acres	300	25	12
	Raking	2,993 acres †	20.0 acres	150	25	6
	Shocking	3,325 acres †	30.0 acres	111	25	5
	Trimming	3,325 acres †	10.0 acres	333	25	14
	Sugar beets: Thinning	211 acres	0.4 acre	528	25	22
	Hoeing	492 acres	1.0 acre	492	25	20
	Irrigating	750 acres †	3.0 acres	250	25	10
	Lettuce: Thinning	60 acres	0.5 acre	120	25	5
	Hoeing	96 acres	1.0 acre	96	25	4
	Cutting	48,000 crates	30.0 packed crates	1,600	25	64
	Irrigating	104 acres †	3.0 acres	34	25	2
	Tomatoes: Setting plants in field	1,650 acres	1.0 acre	1,650	13	127 (from 1st to 15th)
	Replanting	3,300 acres	4	825	25	33
	Apples: Thinning	196 acres	10 trees = 0.17 acre	1,176	25	47
	Grapes: Hoeing and suckering	436 acres †	1.0 acre	436	25	18
	Peaches: Thinning	308 acres	0.4 acre	770	25	31
	Totals			9,301	25	372 man-months
June	Asters: Hoeing	35 acres	0.5 acre	70	25	10
	Zinnias: Hoeing	15 acres	0.5 acre	30		
	Snapdragons: Hoeing	15 acres	0.5 acre	30		
	Petunias: Hoeing	15 acres	0.25 acre	60		
	Marigolds: Hoeing	15 acres	0.5 acre	30		
	Salpiglossis: Hoeing	10 acres	0.5 acre	20		
	Grain: Harvesting	1,284 acres †	4.0 acres	321	12	28 (from 15th to 30th)
	Hay: Baling	5,000 tons	5 tons (per 13-hour day)	1,000	25	40
	Sugar beets: Hoeing	211 acres	1.0 acre	211	25	9
	Irrigating	750 acres †	3.0 acres	250	25	10
	Lettuce: Thinning	36 acres	0.5 acre	72	25	3
	Hoeing	60 acres	1.0 acre	60	25	3

Table continued on next page.

<p>1900-1901</p>	<p>1900-1901</p>	<p>1900-1901</p>	<p>1900-1901</p>	<p>1900-1901</p>	<p>1900-1901</p>
<p>1900-1901</p>	<p>1900-1901</p>	<p>1900-1901</p>	<p>1900-1901</p>	<p>1900-1901</p>	<p>1900-1901</p>

Table continued.

Months	Crop and task	Size of task	Output per man-day	Required man-days	Available days	Required number of workers*
June (cont.)	Lettuce:					
	Cutting	1,200 crates	30.0 packed crates	40	4	10 (for 4 days)
	Irrigating	66 acres †	3.0 acres	22	25	1
	Tomatoes: Hoeing	3,300 acres	1.0 acre	3,300	25	132
	Totals			5,516	25	221 man-months
July	Onion bulbs: Hoeing	15 acres	0.5 acre	30	26	59
	Lettuce: Hand Cutting	300 acres	0.5 acre (per 4 hours)	600 (of 4 hours)		
	Sweet corn: Hoeing	25 acres	1.0 acre	25		
	Squash: Hoeing	40 acres	2.0 acres	20		
	Mustard: Cutting	300 acres	0.6 acre (per 3-hour day)	500 (of 3 hours)		
	Threshing	--	--	140 †		
	Snapdragons: Hand picking 1½ times	8 acres	0.12 acre (per 4-hour day)	96 (of 4 hours)		
	Verbena: Cutting and piling	6 acres	0.25 acre (per 4-hour day)	24 (of 4 hours)		
	Marigold: Cutting and picking	15 acres	0.25 acre (per 4-hour day)	60 (of 4 hours)		
	Salpiglossis: Cutting and piling	10 acres	0.25 acre (per 4-hour day)	40 (of 4 hours)		
	Garlic: Pulling and piling	600 acres	1.0 acre	600	26	23
	Topping and sacking	42,500 sacks	10.0 sacks	4,250	26	164
	Grain: Harvesting	5,136 acres †	4.0 acres	1,284	26	50
	Hay: Baling	5,000 tons	5.0 tons (per 13-hour day)	1,000	26	39
	Sugar beets: Topping and loading	713 tons	6.0 tons	119	6	20 (from 24th to 31st)
	Lettuce: Thinning	60 acres	0.5 acre	120	26	5
	Hoeing	36 acres	1.0 acre	36	26	2
	Cutting	1,200 crates	30.0 packed crates	40	4	10 (for 4 days)
	Irrigating	66 acres †	3.0 acres	22	26	1
	Apricots: Picking	10,800 tons	1,000 pounds	21,600	25	864 (from 5th to 31st)

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Table continued.

Month	Crop and task	Size of task	Output per man-day	Required man-days	Available days	Required number of workers*
July (cont.)	Apricots: Cutting	9,000 tons	600 pounds	30,000	25	1,200 (from 5th to 31st)
	Other labor in dry yards (15 per cent of cutting labor)	--	--	4,500	25	180
	Pears: Picking	242 tons	1.0 ton	242	10	25 (from 20th to 31st)
	Totals			65,348	26	2,514 man-months
August	Radishes: Cutting and piling	150 acres	0.75 acre (per 6-hour day)	200 (of 6 hours)	26	8
	Threshing	--	--	50 †	10	5 (for 10 days)
	Broccoli and cauliflower: Cutting and piling	40 acres	1.5 acres (per 6-hour day)	27 (of 6 hours)	26	5
	Snapdragons: Hand picking (1½ times)	8 acres	0.12 acre (per 4-hour day)	96 (of 4 hours)		
	Garlic: Pulling and piling	600 acres	1.0 acre	600	26	23
	Topping and sacking	42,500 sacks	10.0 sacks	4,250	26	164
	Grain: Harvesting	5,136 acres †	4.0 acres	1,284	26	50
	Sugar beets: Topping and loading	4,277 tons	6.0 tons	713	26	28
	Lettuce: Thinning	120 acres	0.5 acre	240	26	10
	Hoeing	60 acres	1.0 acre	60	6	10 (for 6 days)
	Cutting	2,400 crates	30.0 packed crates	80	8	10 (for 8 days)
	Irrigating	120 acres †	3.0 acres	40	26	2
	Peas: Hoeing	400 acres	0.5 acre	800	26	30
	Apricots: Picking	1,200 tons	1,000 pounds	2,400	13	187 (from 1st to 15th)
	Cutting for drying	1,000 tons	600 pounds	3,333	13	256 (from 1st to 15th)
	Other dry yard labor	--	--	890	23	39 (from 1st to 25th)
	Peaches: Picking	1,848 tons	1,800 pounds	2,053	26	79
	Sorting	1,848 tons	4.5 tons	411	26	16

Table continued on next page. 15

Table continued.

Month	Crop and task	Size of task	Output per man-day	Required man-days	Available days	Required number of workers*
August (cont.)	Pears: Picking	726 tons	1.0 ton	726	26	28
	Cutting for drying	250 tons	0.5 ton	500	26	20
	Other dry-yard labor	250 tons	0.5 ton	500	26	20
	Prunes: Picking up	3,375 tons	1,500 pounds	4,500	26	173
	Dipping and drying (fresh weight)	2,532 tons †	1.2 tons**	2,110	26	81
	Totals			25,863	26	995 man-months
September	Onion bulbs: Pulling and piling	15 acres	0.3 acre	45	26	10
	Topping	3,750 cwt.	20.0 cwt.	187		
	Broccoli and cauliflower: Threshing	--	--	15†		
	Parsley and celery: Cutting and piling	120 acres	0.3 acre (per 4-hour day)	360 (of 4 hours)	26	16
	Petunias: Cutting and piling	15 acres	0.25 acre (per 4-hour day)	60 (of 4 hours)		
	Grain: Harvesting	1,284 acres †	4.0 acres	320	10	32 (from 1st to 10th)
	Sugar beets: Topping and loading	4,277 tons	6.0 tons	713	26	28
	Lettuce: Thinning	372 acres	0.5 acre	744	26	28
	Hoeing	120 acres	1.0 acre	120	26	5
	Cutting	4,800 crates	30.0 packed crates	160	16	10 (for 16 days)
	Irrigating	328 acres †	3.0 acres	110	26	5
	Peas: Picking	6,250 hampers	8.0 hampers	780	10	78 (from 20th to 30th)
	Tomatoes: Picking	5,500 tons	2,500 pounds	4,400	26	169
	Apples: Picking	365 tons	1.5 tons	244	13	19 (from 15th to 30th)
	Pears: Picking	726 tons	1.0 ton	726	26	28
	Cutting for drying	250 tons	0.5 ton	500	26	20
	Other dry-yard labor	--	--	500	26	20

Table continued on next page.

Table continued.

Month	Crop and task	Size of task	Output per man-day	Required man-days	Available days	Required number of workers*
September (cont.)	Prunes: Picking up	10,125 tons	1,500 pounds	13,500	26	520
	Dipping and spreading on trays and drying	7,594 tons †	1.2 ton **	6,330	26	244
	Walnuts: Knocking and picking up	45 tons	0.2 ton	225	6	38 (from 24th to 30th)
	Totals			30,039	26	1,155 man-months
October	Sweet corn: Shucking	25 acres	0.14 acre	175	25	7
	Squash: Pulling	40 acres	4.0 acres	10	25	1
	Asters: Cutting and piling	35 acres	0.3 acre (per 4-hour day)	105 (of 4 hours)	5	21 (for 5 days)
	Zinnias: Picking and piling	15 acres	0.16 acre	90	25	4
	Sugar beets: Topping and loading	4,990 tons	6.0 tons	832	25	34
	Lettuce: Hoeing	372 acres	1.0 acre	372	25	15
	Cutting	24,000 crates	30.0 packed crates	800	25	32
	Irrigating	248 acres †	3.0 acres	82	25	4
	Peas: Picking	18,750 hampers	8.0 hampers	2,344	18	130 (from 1st to 21st)
	Tomatoes: Picking	11,000 tons	2,500 pounds	8,800	25	352
	Apples: Picking	1,095 tons	1.5 tons	730	25	30
	Apricots: Pruning	780 acres	0.17 acre	4,680	12	390 (from 15th to 31st)
	Grapes: Picking	872 tons †	1.0 ton	872	25	35
	Pears: Picking	726 tons	1.0 ton	726	25	29
	Walnuts: Knocking and picking up	337 tons	0.2 ton	1,665	25	67
	Totals			22,283	25	891 man-months
November	Seed crops					
	Parsley and celery: Transplanting	120 acres	0.75 acre	160	23	7
	Lettuce: Cutting	36,000 crates	30.0 packed crates	1,200	23	53
	Apples: Pruning	50 acres	0.2 acre	250	23	11
	Apricots: Pruning	1,560 acres	0.17 acre	9,360	23	407
	Grapes: Picking	872 tons †	1.0 ton	872	23	38

Table continued on next page.

Date	Description	Particulars	Debit	Credit	Balance	Total
1911	Jan 1	Balance				
1911	Jan 1	Balance				
1911	Jan 1	Balance				
1911	Jan 1	Balance				
1911	Jan 1	Balance				
1911	Jan 1	Balance				
1911	Jan 1	Balance				
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1911	Jan 1	Balance				
1911	Jan 1	Balance				
1911	Jan 1	Balance				
1911	Jan 1	Balance				

Table continued.

Month	Crop and task	Size of task	Output per man-day	Required man-days	Available days	Required number of workers on a monthly basis*
November (cont.)	Peaches: Pruning	103 acres	0.25 acre	412	23	18
	Pears: Pruning	320 acres	0.17 acre	1,920	23	84
	Prunes: Pruning	656 acres †	0.33 acre	1,970	23	86
	Walnuts: Knocking and picking up	68 tons	0.2 ton	340	5	68 (from 1st to 5th)
	Totals			16,484	23	717 man-months
December	Seed crops					
	Broccoli and cauliflower: Thinning	40 acres	1.25 acre	32	20	11
	Snapdragons: Knife weeding	15 acres	0.16 acre	90		
	Petunias: Knife weeding	15 acres	0.16 acre	90		
	Garlic: Planting	600 acres	0.16 acre	3,600	20	180
	Lettuce: Cutting	1,200 crates	30.0 packed crates	40	4	10 (for 4 days)
	Apples: Pruning	50 acres	0.2 acre	250	20	13
	Apricots: Pruning	1,560 acres	0.17 acre	9,360	20	468
	Grapes: Pruning	580 acres	1.5 acres	386	20	20
	Peaches: Pruning	103 acres	0.25 acre	412	20	22
	Pears: Pruning	320 acres	0.17 acre	1,920	20	96
	Prunes: Pruning	656 acres*	0.33 acre	1,970	20	99
	Totals			18,150	20	908 man-months

*On a monthly basis unless otherwise noted.

† Estimated portion of job done by seasonal workers.

‡ Allowing 25 per cent extra plants.

§ Practically no thinning of apricots was done in 1935. On years of heavy "set" of fruit, however, this may require almost as many workers as picking.

¶ Estimated as 25 per cent of planting labor.

|| There are probably 2,000 to 3,000 transient workers employed during apricot harvest on the various jobs at the peak of the season in July, in addition to local or resident workers.

**Based on data given in California Agr. Ext. Service Circ. 75.

TABLE 4
Summary of Seasonal Labor Needs by Months
San Benito County
1935

Month	Required man-days of seasonal labor	Available work days during month	Required man-months of seasonal labor
January	15,656	18	870
February	8,489	21	404
March	4,116	23	179
April	5,589	23	243*
May	9,301	25	372
June	5,516	25	221
July	65,348	26	2,514
August	25,863	26	995
September	30,039	26	1,155
October	22,283	25	891
November	16,484	23	717
December	18,150	20	908
Total	226,834	--	9,469

* In seasons when apricots "set" a heavy crop, an additional 20,000 man-days (870 man-months) of seasonal labor may be required for thinning during April.

Notes

Notes on Table 1.-- Acreage and production figures given in table 1 are from the "Crop Report for San Benito County -- 1935," by Ward B. Saunders, Agricultural Commissioner, San Benito County.

Notes on Table 2.-- Data shown concerning "Time of need" breaks down seasonal labor into the period when the work is performed, in order to permit a subsequent determination of labor needs by months (table 3). Some operations are done on only a part of the acreage in a given crop; for example, only one-half of the prune acreage is pruned each year. This having been done in four different months, a portion was allotted to each.

The amount of work done each month is based on the cropping program followed during 1935. The allotting of amounts of work is based on findings concerning local farming practices, resulting from inquiry of producers, and records of carlot shipments, the latter proving helpful in fixing dates of planting, and of subsequent tasks involved in producing certain crops. Proportionate amounts of output harvested each month were determined from data of local practices with respect to harvesting, and in some cases from carlot shipments of perishable products.

Notes on Table 3.-- Table 3 is the condensed summary of labor needs as worked out for San Benito County as a result of findings pertinent to 1935. The data are presented by months with the tasks which were performed in each month indicated by both crop and task. The size of the job was calculated from the data appearing in table 1 (acreage and production) and table 2 (task, time of performance, and percentage of work pertinent to a given month). The output per man-day was calculated as indicated in the foreword presenting table 3. The number of required man-days is a result of dividing the size of task by output per man-day. The available days for the different tasks involve two variables. The first is the number of days when field work is possible because of favorable weather conditions. The basis for this column was determined from a study of the monthly weather charts of the United States Weather Bureau for the years 1933, 1934, and 1935. These data indicated available days per month as follows (based on a 26-day working month without allowance for holidays):

Month	Available work days*	Length of work day <u>hours</u>	Month	Available work days*	Length of work day <u>hours</u>
January	18	9	July	26	10
February	21	9	August	26	10
March	23	10	September	26	10
April	23	10	October	25	10
May	25	10	November	23	9
June	25	10	December	20	9

* Based on rainfall record at Hollister, for the years 1933, 1934, and 1935, from United States Weather Bureau.

[illegible]

The second factor influencing the number of available days was the size of the job. If the output was but for a few carloads, then the number of days was limited to the time needed to get out these cars efficiently. If a field operation had to be performed in a period less than the number of available days in the month, then the specific number of days was noted. These restrictions are shown in parentheses. For example, in April, planting of tomatoes was limited to 12 days during the last half of the month, mowing hay to the last week of the month, etc.

In cases where a job is done partly by regular men and partly by seasonal workers, only the estimated portion done by the latter has been included under the column "Required man-days," and only the number of seasonal workers entered in the last column, "Required number of workers on a monthly basis."

The totals of table 3 show the total required man-days of needed seasonal labor, the available days for field work during the month, and the necessary number of men (as defined in the opening paragraph of table 3) required on a monthly basis to care for the tasks ordinarily performed by occasional or seasonal workers.

In an area such as San Benito County, involving a substantial acreage of truck and orchard crops, the findings as set forth in this report are bound to fluctuate materially from year to year, because of the influence of market outlook upon what, when, and how much is planted; because of variable seasonal conditions affecting yields, times of performing various operations, and available days; and because of harvesting operations on certain crops being speeded up to supply a good market or retarded to avoid a poor one, resulting in marked variations in the need for harvest labor.

Notes on Workers

Workers on the apricot harvest are largely transients who come in the district for this work only. Most of them move on to other localities when the harvest is done. Many local people also work on apricots, however, especially women in the dry yards.

Prune picking is done to a large extent by families, many of whom are residents of the locality, although some transient help is needed. The total labor per acre on prune harvest averages somewhat less than on apricots, and the season is longer with less of a "peak" demand; consequently a much larger proportion of it is done by local people, even though there are considerably more acres of prunes than of apricots in the county.

Tomato picking begins before the prune harvest is over, and for a short time the two crops compete for labor. At this time it is sometimes difficult to get pickers for tomatoes. People who are harvesting prunes usually stay until that work is done, and hence are not available for tomato work until later. Transient help is needed for harvesting tomatoes.

Work on lettuce and garlic is done to a considerable extent by men who also work in the vegetable district near Salinas, and apparently have been available in sufficient numbers. Various shippers operate in both districts.

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Peas are a relatively new crop in the county. Harvesting is mostly done by transient workers who follow this crop from one district to another. Practically no spring peas are raised, but the fall acreage is considerable and requires a large number of workers for a short period.

Pruning, spraying, irrigating, walnut harvesting, grape picking, and many other tasks, while needing seasonal labor, are done mostly by local residents.

Potential Peak Demands for Seasonal Labor

The following table is presented to show more clearly the most important labor demands caused by San Benito County crops for which transient labor is usually needed, and the extent to which such demands may rise when crops are full. It is not expected that the demand for workers will reach the highest point indicated every year, nor that all crops will require the maximum number of workers in any one season. Also it must be borne in mind that ordinarily the greater the number of workers, the quicker the job will be done, and the shorter the season of employment will be. For this reason the "man-months" as shown for each month in table 3, should be more useful in estimating the amount of work to be done, although it may not show the extreme peak demands for workers as well as table 5.

TABLE 5

Potential Peak Demands for Seasonal Labor
San Benito County

(For most important crops and operations for which transient help is needed)

Crop	Operation	Basis of estimate	Acreage involved	Usual time of peak season	Probable maximum number of workers needed at peak*
Apricots	Thinning	1 man to 3 acres	5,204	April 10 to 30	1,400
	Picking	1 man to 2 acres	5,204	July 5 to Aug. 1	2,600
	Cutting for drying †	2 cutters per picker	4,000	July 5 to Aug. 1	4,000
Prunes	Picking up	1 picker to 5 acres	7,030	Aug. 20 to Sept. 20	1,400
Tomatoes (canning)	Picking	15 men per 100 acres	3,300	Sept. 15 to Nov. 1	500
Garlic	Planting	1 man to 3 acres	1,200	December or January	400
	Harvesting	1 man to 3 acres	1,200	July or August	400
Lettuce	Cutting	11 men per car per day	8 cars per day	May 1 to 25	88
Peas	Picking	1 picker per acre	500	Sept. 20 to Oct. 20	500

* These figures are intended to indicate only the extreme "peak" demand, and this number of workers would in most cases be employed for a few days only.

† Assuming 80 per cent of crop is dried.

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